Release notes for ENDF/B Development n-050_Sn_114 evaluation

April 26, 2017

- `checkr` Warnings:

  1. A previous error halted parsing of the current section
     MAT=5031, MF= 1, MT=451 (1): Parsing stopped

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 1, MT=451
            SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER     249 TO     328
     ```

- `checkr` Errors:

  1. A variable is outside the allowed ENDF range
     MAT=5031, MF= 1, MT=451 (0): Variable range

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 1, MT=451
            MOD =    1 OUT OF RANGE    0 -    0          RECORD NUMBER     249
     ```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5031, MF= 2, MT=151 (0): Directory (b)

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 2, MT=151
            SECTION  2/151 NOT IN DIRECTORY              RECORD NUMBER     330
     ```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5031, MF= 3, MT= 1 (0): Directory (b)

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 3, MT=  1
            SECTION  3/  1 NOT IN DIRECTORY              RECORD NUMBER     451
     ```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5031, MF= 3, MT= 2 (0): Directory (b)

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 3, MT=  2
            SECTION  3/  2 NOT IN DIRECTORY              RECORD NUMBER     483
     ```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5031, MF= 3, MT= 4 (0): Directory (b)

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 3, MT=  4
            SECTION  3/  4 NOT IN DIRECTORY              RECORD NUMBER     515
     ```

  6. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5031, MF= 3, MT= 16 (0): Directory (b)

     ```
          ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 16
            SECTION  3/ 16 NOT IN DIRECTORY              RECORD NUMBER     534
     ```

  7. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5031, MF= 3, MT= 17 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 17
    SECTION  3/ 17 NOT IN DIRECTORY                 RECORD NUMBER     543
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=5031, MF= 3, MT= 22 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 22
    SECTION  3/ 22 NOT IN DIRECTORY                 RECORD NUMBER     548
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=5031, MF= 3, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 28
    SECTION  3/ 28 NOT IN DIRECTORY                 RECORD NUMBER     562
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 51
    SECTION  3/ 51 NOT IN DIRECTORY                 RECORD NUMBER     573
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 52
    SECTION  3/ 52 NOT IN DIRECTORY                 RECORD NUMBER     592
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 53
    SECTION  3/ 53 NOT IN DIRECTORY                 RECORD NUMBER     610
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 54
    SECTION  3/ 54 NOT IN DIRECTORY                 RECORD NUMBER     627
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 55
    SECTION  3/ 55 NOT IN DIRECTORY                 RECORD NUMBER     644
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 56
          SECTION  3/ 56 NOT IN DIRECTORY                RECORD NUMBER     661
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 57
          SECTION  3/ 57 NOT IN DIRECTORY                RECORD NUMBER     677
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 58
          SECTION  3/ 58 NOT IN DIRECTORY                RECORD NUMBER     693
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 59
          SECTION  3/ 59 NOT IN DIRECTORY                RECORD NUMBER     709
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 60
          SECTION  3/ 60 NOT IN DIRECTORY                RECORD NUMBER     724
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 61
          SECTION  3/ 61 NOT IN DIRECTORY                RECORD NUMBER     739
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 62
          SECTION  3/ 62 NOT IN DIRECTORY                RECORD NUMBER     754
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 63 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 63
          SECTION  3/ 63 NOT IN DIRECTORY                RECORD NUMBER     768
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 64 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 64
     SECTION  3/ 64 NOT IN DIRECTORY              RECORD NUMBER     782
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 65 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 65
     SECTION  3/ 65 NOT IN DIRECTORY              RECORD NUMBER     796
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 66 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 66
     SECTION  3/ 66 NOT IN DIRECTORY              RECORD NUMBER     809
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 67 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 67
     SECTION  3/ 67 NOT IN DIRECTORY              RECORD NUMBER     822
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 68 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 68
     SECTION  3/ 68 NOT IN DIRECTORY              RECORD NUMBER     835
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 69 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 69
     SECTION  3/ 69 NOT IN DIRECTORY              RECORD NUMBER     847
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 70 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 70
     SECTION  3/ 70 NOT IN DIRECTORY              RECORD NUMBER     859
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 71 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 71
     SECTION  3/ 71 NOT IN DIRECTORY              RECORD NUMBER     870
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 72 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 72
            SECTION  3/ 72 NOT IN DIRECTORY                 RECORD NUMBER     881
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 73 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 73
            SECTION  3/ 73 NOT IN DIRECTORY                 RECORD NUMBER     892
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 74 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 74
            SECTION  3/ 74 NOT IN DIRECTORY                 RECORD NUMBER     902
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 75 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 75
            SECTION  3/ 75 NOT IN DIRECTORY                 RECORD NUMBER     912
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 76 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 76
            SECTION  3/ 76 NOT IN DIRECTORY                 RECORD NUMBER     922
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT= 91 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT= 91
            SECTION  3/ 91 NOT IN DIRECTORY                 RECORD NUMBER     931
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT=102 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT=102
            SECTION  3/102 NOT IN DIRECTORY                 RECORD NUMBER     940
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT=103 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=5031, MF= 3, MT=103
            SECTION  3/103 NOT IN DIRECTORY                 RECORD NUMBER     966
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT=104 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT=104
            SECTION  3/104 NOT IN DIRECTORY                 RECORD NUMBER      981
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT=105 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT=105
            SECTION  3/105 NOT IN DIRECTORY                 RECORD NUMBER      993
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT=106 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT=106
            SECTION  3/106 NOT IN DIRECTORY                 RECORD NUMBER     1003
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 3, MT=107 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 3, MT=107
            SECTION  3/107 NOT IN DIRECTORY                 RECORD NUMBER     1015
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 2 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT=  2
            SECTION  4/  2 NOT IN DIRECTORY                 RECORD NUMBER     1032
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 16 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 16
            SECTION  4/ 16 NOT IN DIRECTORY                 RECORD NUMBER     1253
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 17 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 17
            SECTION  4/ 17 NOT IN DIRECTORY                 RECORD NUMBER     1264
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 22 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 22
            SECTION  4/ 22 NOT IN DIRECTORY                 RECORD NUMBER     1275
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 28
   SECTION  4/ 28 NOT IN DIRECTORY                RECORD NUMBER    1286
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 51
   SECTION  4/ 51 NOT IN DIRECTORY                RECORD NUMBER    1297
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 52
   SECTION  4/ 52 NOT IN DIRECTORY                RECORD NUMBER    1320
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 53
   SECTION  4/ 53 NOT IN DIRECTORY                RECORD NUMBER    1343
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 54
   SECTION  4/ 54 NOT IN DIRECTORY                RECORD NUMBER    1366
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 55
   SECTION  4/ 55 NOT IN DIRECTORY                RECORD NUMBER    1389
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 56
   SECTION  4/ 56 NOT IN DIRECTORY                RECORD NUMBER    1412
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 57
   SECTION  4/ 57 NOT IN DIRECTORY                RECORD NUMBER    1435
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 58
           SECTION  4/ 58 NOT IN DIRECTORY                 RECORD NUMBER    1458
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 59
           SECTION  4/ 59 NOT IN DIRECTORY                 RECORD NUMBER    1481
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 60
           SECTION  4/ 60 NOT IN DIRECTORY                 RECORD NUMBER    1504
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 61
           SECTION  4/ 61 NOT IN DIRECTORY                 RECORD NUMBER    1527
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 62
           SECTION  4/ 62 NOT IN DIRECTORY                 RECORD NUMBER    1550
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 63 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 63
           SECTION  4/ 63 NOT IN DIRECTORY                 RECORD NUMBER    1573
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 64 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 64
           SECTION  4/ 64 NOT IN DIRECTORY                 RECORD NUMBER    1596
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 65 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 65
           SECTION  4/ 65 NOT IN DIRECTORY                 RECORD NUMBER    1619
```

63. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 66 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 66
        SECTION  4/ 66 NOT IN DIRECTORY                RECORD NUMBER    1642
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 67 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 67
        SECTION  4/ 67 NOT IN DIRECTORY                RECORD NUMBER    1665
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 68 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 68
        SECTION  4/ 68 NOT IN DIRECTORY                RECORD NUMBER    1688
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 69 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 69
        SECTION  4/ 69 NOT IN DIRECTORY                RECORD NUMBER    1711
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 70 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 70
        SECTION  4/ 70 NOT IN DIRECTORY                RECORD NUMBER    1734
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 71 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 71
        SECTION  4/ 71 NOT IN DIRECTORY                RECORD NUMBER    1757
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 72 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 72
        SECTION  4/ 72 NOT IN DIRECTORY                RECORD NUMBER    1780
```

70. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 73 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 73
        SECTION  4/ 73 NOT IN DIRECTORY                RECORD NUMBER    1803
```

71. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5031, MF= 4, MT= 74 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 74
           SECTION  4/ 74 NOT IN DIRECTORY                 RECORD NUMBER    1826
```

72. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 75 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 75
           SECTION  4/ 75 NOT IN DIRECTORY                 RECORD NUMBER    1849
```

73. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 76 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 76
           SECTION  4/ 76 NOT IN DIRECTORY                 RECORD NUMBER    1872
```

74. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 4, MT= 91 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 4, MT= 91
           SECTION  4/ 91 NOT IN DIRECTORY                 RECORD NUMBER    1895
```

75. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 5, MT= 16 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 5, MT= 16
           SECTION  5/ 16 NOT IN DIRECTORY                 RECORD NUMBER    1919
```

76. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 5, MT= 17 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 5, MT= 17
           SECTION  5/ 17 NOT IN DIRECTORY                 RECORD NUMBER    1970
```

77. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 5, MT= 22 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 5, MT= 22
           SECTION  5/ 22 NOT IN DIRECTORY                 RECORD NUMBER    1987
```

78. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 5, MT= 28 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5031, MF= 5, MT= 28
           SECTION  5/ 28 NOT IN DIRECTORY                 RECORD NUMBER    2190
```

79. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5031, MF= 5, MT= 91 (0): Directory (b)

```
                   ERROR(S) FOUND IN MAT=5031, MF= 5, MT= 91
                      SECTION  5/ 91 NOT IN DIRECTORY                RECORD NUMBER    2292
```

- `psyche` Warnings:

  1. Level density in URR not in agreement with PSYCHE's expectations
     FILE 2 / SECTION 151 / ENERGY = 2.00000E+03. STRENGTH FUNCTION IS
     7.59976E-05 / ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 7.59976E-05 /
     DENSITY 7.73880E+01 SHOULD BE 7.60533E+01 (0): URR dens. (a)

     ```
     FILE  2
        SECTION 151
             ENERGY =  2.00000E+03. STRENGTH FUNCTION IS  7.59976E-05
                     ENERGY =  2.00000E+03. STRENGTH FUNCTION IS  7.59976E-05
                             DENSITY  7.73880E+01 SHOULD BE  7.60533E+01
     ```

- `groupie` Errors:

  1. Very small elastic cross section found
     0: Small elastic

     ```
     Multi-Group and Multi-Band Parameters from ENDF/B Data (GROUPIE 2015-2)
     ----------------------------------------------------------------------
     ENDF/B Input and Output Data Filenames
     ENDFB.IN
     ENDFB.OUT
     ... [97 more lines]
     ```

- `fudge-4.0` Warnings:

  1. Missing a channel with a particular angular momenta combination
     resonances / resolved / MultiLevel_BreitWigner (Error # 0): missingResonanceChannel

     ```
     WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
     WARNING: Missing a channel with angular momenta combination L = 1, J = 0.5 and S = 1.5 for "capture"
     WARNING: Missing a channel with angular momenta combination L = 1, J = 1.5 and S = 1.5 for "capture"
     WARNING: Missing a channel with angular momenta combination L = 1, J = 2.5 and S = 1.5 for "capture"
     ```

  2. Cross section does not match sum of linked reaction cross sections
     crossSectionSum label 0: total (Error # 0): CS Sum.

     ```
     WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.32%
     ```

  3. Cross section does not match sum of linked reaction cross sections
     crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

     ```
     WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.12%
     ```

- `fudge-4.0` Errors:

  1. Calculated and tabulated Q values disagree.
     reaction label 28: n[multiplicity:'2'] + Sn113 (Error # 0): Q mismatch

     ```
     WARNING: Calculated and tabulated Q-values disagree: -9640854.215682983 eV vs -1.03041e7 eV!
     ```

2. Calculated and tabulated Q values disagree.
   reaction label 29: n[multiplicity:'3'] + Sn112 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -17383941.08781433 eV vs -1.80542e7 eV!
   ```

3. Calculated and tabulated Q values disagree.
   reaction label 30: n + H1 + In113 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -7821926.097518921 eV vs -8481630. eV!
   ```

4. Calculated and tabulated Q values disagree.
   reaction label 31: Sn115 + gamma (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: 8204719.430053711 eV vs 7546590. eV!
   ```

5. Calculated and tabulated Q values disagree.
   reaction label 32: n + He4 + Cd110 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1974501.168395996 eV vs -2.6329e6 eV!
   ```

6. Calculated and tabulated Q values disagree.
   reaction label 33: H1 + In114_s (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -548074.6940917969 eV vs -1201540. eV!
   ```

7. Calculated and tabulated Q values disagree.
   reaction label 34: H2 + In113_s (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -5597359.996582031 eV vs -6171510. eV!
   ```

8. Calculated and tabulated Q values disagree.
   reaction label 35: H3 + In112_s (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -8784997.66229248 eV vs -9434450. eV!
   ```

9. Calculated and tabulated Q values disagree.
   reaction label 36: He3 + Cd112_s (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -6181955.684173584 eV vs -6837930. eV!
   ```

10. Calculated and tabulated Q values disagree.
    reaction label 37: He4 + Cd111_s (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: 5001344.796524048 eV vs 4348190. eV!
    ```

- `njoy2012`   Warnings:

  1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

     ```
     ---message from conver---cannot do complete particle production for mt= 16
                         only mf4/mf5 provided
     ```

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2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 17
                         only mf4/mf5 provided
```

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 22
                         only mf4/mf5 provided
```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 28
                         only mf4/mf5 provided
```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 91
                         only mf4/mf5 provided
```